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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/449,969	11/26/1999	CAMERON BOLITHO BROWNE	169.1532	6958

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FITZPATRICK CELLA HARPER & SCINTO
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER

LUDWIG, MATTHEW J

ART UNIT	PAPER NUMBER
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2178

DATE MAILED: 11/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/449,969

Applicant(s)

BROWNE ET AL.

Examiner

Matthew J. Ludwig

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 25-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 25 and 28-34 is/are rejected.
- 7) ☒ Claim(s) 26 and 27 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

1. This action is responsive to communications: Amendment A filed 9/10/03.
2. Claims 25, 28-34 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Karow in view of Nakayama.
3. Claims 25-34 are pending in the case. Claims 25, 28, and 32 are independent claims.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 25, 28-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karow et al., USPN 5937420 filed (07/23/1996) in view of Nakayama et al., USPN 5,883,637 filed (11/14/1996).

In reference to independent claim 25, Karow teaches:

A method of adjusting kerning comprising estimating the amplitude of each character in a kerning direction of a character pair (col. 2, lines 14-49, Karow uses sidebearings as spacing metrics to determine character amplitude). Karow teaches applying a function to each amplitude (col. 2, lines 14-48, Karow interpolates values using the previously determined amplitudes). Karow also teaches increasing the kerning value for each character pair by the sum of the functions (col. 2, lines 44-48).

Karow does not explicitly teach estimating the amplitude of a character modification in a kerning direction. However, the invention taught by Karow is applicable to both modified

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character pairs as it is to unmodified character pairs. It would have been obvious to one of ordinary skill in the art at the time of the invention to use Karow's invention with a modified character pair, because after modifying a character pair, a user would have naturally desired to reapply any automatic kerning process to put the new character pair into the best possible spacing situation for efficient viewing.

Korow teaches analyzing character pairs for determination of kerning values (col. 3, lines 30-33. However, the reference does not explicitly teach estimating, *independent of any characters in the set other than the pair of characters to be modified*; however, Nakayama demonstrates the utilization of a space reduction unit, based on the character data having correction lines added thereto and stored in the added character data storage, which computes a minimum space between the faces of a preceding character acting as a reference character and a succeeding character acting as an object character. See col. 7, lines 45-57. The unit provides a means and employment of correction lines independent of any characters other than the reference character and an object character. It would have been obvious to one of ordinary skill in the art, having the teachings of Karow and Nakayama before him at the time the invention was made, to modify the character pair taught by Karow utilizing the reduction computing methods of Nakayama, because they would have provided the author an improved method for adjusting the position of a object pair (modifying) and improving the kerning method as taught by Nakayama. In reference to independent claim 28, Karow teaches a memory means to store a known kerning value for a character pair (col. 1, lines 29-33 and col. 5, line 6). Karow teaches a method of adjusting kerning comprising estimating the amplitude of each character in a kerning direction of a character pair (col. 2, lines 14-49, Karow uses sidebearings as spacing metrics to determine

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character amplitude). Karow teaches applying a function to each amplitude (col. 2, lines 14-48, Karow interpolates values using the previously determined amplitudes(s)). Karow also teaches increasing the kerning value for each character pair by the sum of the functions (col. 2, lines 44-48 and col. 5, lines 6-7). Karow teaches a memory means to store the sum of the addition as an increased kerning value for each modified character pair (col. 4, lines 50-62).

Karow does not explicitly teach estimating the amplitude of a character modification in a kerning direction. However, the invention taught by Karow is applicable to both modified character pairs as it is to unmodified character pairs. It would have been obvious to one of ordinary skill in the art at the time of the invention to use Karow's invention with a modified character pair. After modifying a character pair, a user would have naturally desired to reapply any automatic kerning process to put the new character pair into the best possible spacing situation for easy viewing.

In reference to independent claim 28, the limitations reflects the apparatus used for performing the methods as claimed in independent claim 25, and in further view of the following, is rejected along the same rationale.

In reference to dependent claim 29-30, Karow teaches memory means for storing data as either RAM or ROM (col. 5, lines 55-56 – col. 6, lines 6-7 and col. 4, lines 50-62).

In reference to dependent claim 31, Karow teaches adjusting values with an adder (col. 2, lines 44-48 and col. 5, lines 6-7).

In reference to dependent claim 32, the claim incorporates substantially similar subject matter as claim 28, and is rejected along the same rationale.

In reference to dependent claim 33, Karow teaches a value adjustment wherein a new kerning distance is calculated by the sums of an old kerning distance and the resultant values of functions performed on two character amplitudes (col. 2, lines 44-48 and col. 5, lines 6-7).

In reference to dependent claim 34, the rejection of claim 33 is fully incorporated in this rejection. Karow does not explicitly teach an adjusting means having an adjusted kerning value of the sum of an old kerning value and twice the value of a function applied to a maximum modification amplitude. However, the equation of 34 is equivalent to the equation of claim 33 when a (of claim 33) = b and a and b are maximum values. When this occurs $f(a) = f(b)$ and $f(a) + f(b) = 2f(a) = 2f(b)$. When a is a maximum value, the $f(max) = f(a) = f(b) = A$ (where A is substituted for a of claim 34). It then follows that $f(a) + f(b) = 2A$ and the equations are equivalent. Although Karow does not explicitly disclose maximum amplitudes, he uses sidebearings for determining kerning values (as per claim 1's rejection), these sidebearings implicitly designating a maximum space given to a character (see Fig. 2, numbers 32 and 34). In the case of the sidebearings being equivalent (as in the case of two adjacent letters being the same; see Fig. 4), then the equation as claimed in claim 34 would be equivalent to that claimed in claim 33.

Allowable Subject Matter

6. Claims 26 and 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

7. Applicant's arguments filed 9/10/03 have been fully and carefully considered but they are not persuasive.

It is respectfully noted that Applicant's incorporation of newly formed limitations into independent claim 1, changes the scope of the claim when interpreted as a whole. Therefore, the instant rejections have been adjusted accordingly.

Applicant argues on pages 7 & 8 of the amendment that the reference does not teach or suggest the limitations of claim 1. Applicant further states that Karow neither discloses nor suggests estimating, "*independent of any characters in the set other than the pair of characters to be modified*". Because the claim limitations are to be given their broadest reasonable interpretation within the scope of the art, the kerning methods of Nakayama combined with the character pair methods of Karow provide a reasonable interpretation of the newly amended claim.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J. Ludwig whose telephone number is 703-305-8043.

The examiner can normally be reached on 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon can be reached on 703-308-5186. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

ML
November 6, 2003


STEPHEN S. HONG
PRIMARY EXAMINER